

Appendix 1: PROGRAMME SPECIFICATION

Computing Programme Specification

| 1. Qualification | 2. Programme Title | 3. UCAS | 4. Programme Type |
|--|--------------------|---------|---------------------|
| B.Sc (Hons) | Computing | | Full time/Part-time |
| 5. Main Purposes and Distinctive Features of the Programme | | | |
| <p>i To develop in the student an in depth understanding of the role, design, development and operation of computer-based information systems in the context of the information requirements of business</p> <p>ii To provide students with the knowledge and skills required to contribute to the analysis, design, testing and development of software systems in a systematic and professional manner</p> <p>iii To develop a professional approach to information systems engineering</p> <p>iv To expose students to current and future issues affecting the development of computer-based information systems.</p> <p>iii. To develop the students' ability to adopt new methods and technology and to keep abreast of developments in hardware and software.</p> <p>iv. To give a broad education in computing and its applications in business and industry.</p> <p>vii To develop and improve the students' interpersonal and communication skills particularly the investigative, formal writing, formal presentation and group working skills that are required for the workplace</p> <p>viii To enable students to apply a critical and analytical approach to problem solving and the investigation of topics in Computing.</p> <p>ix To develop and improve the students' interpersonal and communication skills particularly the investigative, formal writing, formal presentation and group working skills that are required for the workplace.</p> | | | |

6. What a graduate should know and be able to do on completion of the programme (objectives and learning outcomes)

To gain the qualification the learner will have demonstrated: i) subject knowledge and understanding ii) cognitive skills iii) discipline-related practical and professional skills and iv) other general skills and capabilities (e.g. key/transferable/common) as specified in the learning objectives/outcomes for approved modules in the programme. Further details of module outcomes can be found in the programme document.

| <i>Knowledge and understanding in the context of the subject(s)</i> | <i>Subject-specific practical/professional skills</i> |
|---|---|
| i Understanding of the stages of the systems life cycle | i plan, monitor, control, implement and document a small software system |
| ii Knowledge of the tools and techniques that can be used at the different stages of the life | to defined standards investigate and document a well-defined system to a standard |

- cycle
- iii Understanding of the systems, program and data modelling/ design techniques that are fundamental to systems development and corresponding skills
- iv Structured design skills in a range of computer applications
- v Understand the gathering, processing, storage and management of data
- vi The role in organisations and the basic technology of computer networks

- Cognitive skills in the context of the subject(s)*
- i Capacity to identify and solve problems and to develop a systematic approach to reaching a solution
 - ii ability to apply concepts
 - iii competence in evaluating alternatives
 - iv capability to transfer skills/knowledge to new areas
 - v competence in designing new products or services
 - vi ability to use a range of thought processes
 - vii ability to critically evaluate the work of others and own contribution to a project

- using appropriate tools.
- iii produce a requirements specification using a standard method
- iv evaluate, select and justify the hardware and software requirements needed to meet a well-defined set of requirements
- v design, implement and test a database using an industry-standard database package.
- vi use software development tools, operating systems and the internet
- i. design and implement user interactions and interfaces

- Other skills (e.g. key/transferrable) developed in subject or other contexts*
- i communicate effectively both in writing and orally
 - ii numerical skills appropriate to a computer systems developer
 - iii work competently as part of a team
 - iv ability to investigate and design solutions for routine and non-routine problems
 - i. research a new area in Computing as a basis for a project
 - ii. carry out a substantial piece of independent work

7. Qualities, Skills & Capabilities Profile

The educational and training goals of the programme seek to develop and demonstrate the following qualities, skills, capabilities and values in its graduates

| A Cognitive | B Practical | C Personal & Social | D Other |
|-------------------------------|----------------------------|---------------------|---------|
| Problem Solving | Analysis and Design Skills | Team-working | |
| Application of Concepts | Programming Skills | Communication | |
| Powers of critical evaluation | QA and Testing Skills | Time management | |

| | | | |
|--|---|---------------------------------|--|
| Transfer skills/knowledge | Database Skills | Working with 'users' | |
| Design new products | Technical documentation | Career development and planning | |
| Flexibility of thought | Evaluation of hardware and software | Professional Development | |
| Research skills | User interaction design | | |
| Clarification of Objectives | Formal Presentation | | |
| Synthesis of differing methods and approaches to problem solving | Use of software tools and operating systems | | |

8. Subjects Studied, Levels, Credits & Qualifications

(Duration and structure of programme/modes of study/credit volume of study units)
 3 years full-time (4.5 years part-time at two modules per semester) for the award of Degree
 6 level 1, 6 level 2 and 6 level 3 modules worth 20 credits
 Courses organised on a two-semester year

| | | Core Modules | Optional Modules | |
|--------|----------|--|---|---|
| Part 2 | Level H3 | Computing Project Professional Issues in Computing Programming | Advanced Database Systems Client Server Solutions Electronic Commerce Internet Security Object Oriented Methods 2 Software Engineering User Interface Design Web & Systems Based Advanced Systems Design | Bachelor Honours Degree 360 Credits |
| | Level H2 | Data Structures and Algorithms Database Theory and Practice Object Oriented Methods 1 Networks and Communications Systems Analysis | Building Office Applications Visual Programming 2 Internet 2 Human Computer Interaction Work Placement | |
| Part 1 | Level | Core Skills Information Systems Networking Basics Introduction to Programming Programming and Design | Computer Systems Architecture Computerised Financial Systems Internet 1 Visual Programming 1 | |

N.B. Modules in bold comprise the five modules (120 level 3 credits) that make up the one-year programme offered off-campus in Malaysia

9. Learning, Teaching and Assessment Strategy

Learning and Teaching Methods

A combination of lectures, supervised and unsupervised practical work, directed study, Case Study weeks, group-working and a project

Assessment Methods

Assessments are linked to the student outcomes for each module.

Types of assessment include:

- Examinations
- Coursework reports
- Coursework to produce a program/ model a system
- Project to produce and document a piece of software

Assessment Classification System

| Description | Mark Range | Degree |
|------------------------------|------------|--------|
| Class | | |
| Work of Exceptional Quality | 70 - 100 | I |
| Work of Very Good Quality | 60-69 | II.i |
| Work of Good Quality | 50-59 | II.ii |
| Work of Satisfactory Quality | 40-49 | III |
| Borderline fail | 35-40 | Fail |
| Clear Fail | 0-34 | |

10. Other Information

Date programme first to be offered
1999

Admissions Criteria

The standard minimum requirements for the pathway are as follows:

2 A Level passes + 3 subjects at GCSE with grade C or above including English Language and Mathematics
OR

3 passes at Scottish Certificate 'Higher' grade + 2 passes at standard grade
OR

BTEC National Certificate/Diploma
OR

Advanced GNVQ
OR

NVQ Level III
OR

Pass in Access to Higher Education course
OR

Irish Leaving Certificate

Fail

The definitions of the above criteria are:

Work of Exceptional Quality

Virtually all of the relevant information/skills accurately deployed. Excellent and exceptional grasp of theoretical, conceptual, analytical and practical elements. Very effective integration of theory, practice and information in relation to the objectives of the assessment. Substantial evidence of originality and creativity as appropriate to the subject.

Work of Very Good Quality

Most of the relevant information/skills accurately deployed. Good grasp of theoretical, conceptual, analytical, practical elements. Effective integration of theory, practice and information in relation to the objectives of the assessment. Significant evidence of originality and creativity as appropriate to the subject.

Work of Good Quality

Some of the relevant information/skills accurately deployed. Adequate grasp of theoretical, conceptual, analytical and practical elements. Fair integration of theory, practice and information in relation to the objectives of the assessment. Some evidence of originality and creativity as appropriate to the subject.

Work of Satisfactory Quality

Some omissions in the deployment of information/skills. Some grasp of theoretical, conceptual, analytical and practical elements. Limited integration of theory, practice and information in relation to the objectives of the assessment. Limited evidence of originality and creativity as appropriate to the subject.

Borderline Fail

Deficiencies or omissions in information, skills, theoretical, conceptual, practical elements. Limited integration of these in relation to the assessed work's objectives. Some relevant content and marginal evidence of skills, knowledge or creativity which could, in the light of overall performance, constitute the basis for a pass grade in the examiners' judgement.

Clear Fail

Little evidence of the information, skills, theoretical, conceptual, analytical, creative or practical elements relevant to the assessment. Mainly irrelevant and/or incorrect information provided. Scant evidence of understanding of the requirements of the assessment.

OR

Other equivalent qualifications

Applicants who have successfully completed an HND/C in a Computing subject and who have 3 Merits at Level 2 will be accepted onto the degree. We will grant an exemption from all level one modules and we will grant exemptions from any level 2 modules for which the applicant has a merit in an equivalent level 2 HND/C module. Students who have the requisite merit profile from Bolton Institute's current HND in Computing may be able to acquire a maximum of six exemptions and will therefore need a minimum of two semesters to complete their degree.

Non Standard Entry

Applicants who do not have any of the above qualifications are regarded as non-standard applicants. To be considered for entry, non-standard applicants must normally be at least 21 years of age on 1st September of the year in which their programme begins.

Non-standard applicants will normally attend an informal interview with the course leader, in order to assess their level of academic competence as well as experience and motivation.

Indicators of Quality and Standards

Validated by panel with two external subject specialists

External verifier

Internal yearly quality monitoring cycle